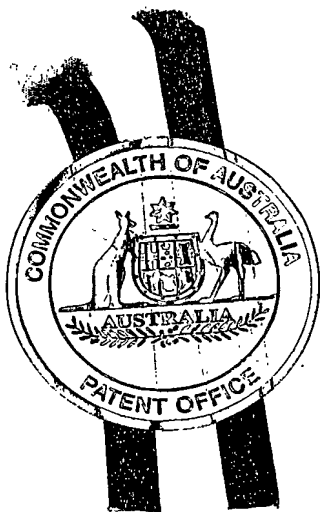




PCT/AU2004/001581

Patent Office  
Canberra

I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2004906298 for a patent by AUSTRALIAN CONSTRUCTION TECHNOLOGY PTY LTD as filed on 18 May 2004.



WITNESS my hand this  
First day of December 2004

A stylized handwritten signature of Leanne Mynott, consisting of a large, sweeping 'L' and 'M'.

LEANNE MYNOTT  
MANAGER EXAMINATION SUPPORT  
AND SALES

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## **HISTORY OF PLASTERBOARD BUTT JOINT PREPARATIONS.**

### **METHOD NO. 1**

#### **INSTALLATION**

FINISH SHEET CEILINGS SCREW CLEATS ON FACE OF EVERY SHEET @ 200MM CRS. ALTERNATE SIDES OF BUTT JOINT. PUSH CLOUTS OR SCREWS IN BETWEEN FACE OF PLASTER AND CLEAT TO RECESS BUTT JOINT. BACK BLOCK BUTT JOINTS AND WAIT TO DRY. THEN CAN BE TROWELLED.

THIS METHOD IS IN THE GYPROCK RED BOOK AND IS VERY TIME CONSUMING.

#### **TECHNICAL PROBLEMS**

TOO MUCH HANDLING AND TOO MUCH TIME TAKEN IN SETTING UP.

#### **PREPARATION FINISH**

SUB-STANDARD. TIME TO COMPLETE 10MINS.

### **METHOD NO. 2**

INSTALL FIRST SHEET OF PLASTER IN CEILING, CANTILEVER MACHINE OR CUT EDGE 225MM OVER BOTTOM CHORD OF ROOF TRUSS. SCREW 1M OF TIMBER CENTRAL ABOUT EDGE THEN INSTALL ADJACENT SHEET. THIS RESULTS IN A FLAT JOINT BUT TAKES A LOT OF SKILL TO COMPLETE THE FINISH.

#### **TECHNICAL PROBLEMS**

A COMMON PRACTICE BUT NOT ACCEPTED BY AUSTRALIAN STANDARDS. TIME WISE THE LONGEST METHOD.

#### **PREPARATION FINISH**

GOOD, BUT GREAT SKILL REQUIRED TO COMPLETE THE FINISH. TIME TO COMPLETE 15MINS.

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### **METHOD NO. 3**

CUT 4 LENGTHS OF FURRING CHANNEL 400MM LONG, BEND SLIGHTLY CENTRALLY, THEN SCREW CENTRALLY OVER MACHINE EDGE OF FIRST CEILING SHEET. INSTALL NEXT SHEET OF PLASTER TO FURRING CHANNEL. THIS GIVES A FALSE RECESS AND IS NOT A VERY TIGHT FIT. A LOT SKILL REQUIRED FOR THE FINISH.

### **TECHNICAL PROBLEMS**

SUB-STANDARD TIME TO COMPLETE 15MINS.

### **SUMMARY**

METHOD NOS. 1 & 3 ARE VERY TIME CONSUMING & ARE NOT A VERY TIGHT FIT WITH A SUB STANDARD FINISH.

METHOD NO 2 IS WIDELY USED IN THE TRADE DUE TO THE LACK OF SKILL REQUIRED. BUT IT IS A NON STANDARD METHOD.

THEREFORE THERE NEEDS TO BE A QUICKER, MORE PRESENTABLE METHOD THAT IS AUSTRALIAN STANDARDS APPROVED AND ENVIRONMENTALY FRIENDLY.

## **INTRODUCING THE PLASTERBOARD BUTT JOINT CONNECTOR [P.B.J.C.]**

THE P.B.J.C. IS FABRICATED OUT OF RE-CYCLED PLASTIC, TO SUIT TIMBER TRUSS CENTRES OF 450MM OR 600MM. IT SUITABLE FOR A NUMBER OF APPLICATIONS.

1. CEILING BUTT JOINTS.
2. CEILING PROP FOR WALL CHANNELS.
3. CEILING PROP FOR CORNER WALL CHANNELS.

### **INSTALLATION**

#### **APPLICATION NO.1**

THE P.B.J.C IS EASILY SCREWED ONTO THE FIRST CEILING SHEET WHICH IS ALREADY INSTALLED ONTO THE BOTTOM CHORD OF THE CEILING TRUSS. THE MACHINED OR CUT EDGE TO BE APPROX. IN THE CENTRE OF THE TRUSSES. THEN THE NEXT SHEET IS INSTALLED BY SCREWS TO THE P.B.J.C. THIS GIVES AN ACCURATE REBATE RECESS. THE P.B.J.C. HAS MARKINGS ALONG THE CROSS SECTION SO THE PLASTERER CAN CHOOSE THE DESIRED DEPTH FOR FINISHING. THE P.B.J.C. GIVES AN ACCURATE FILL OF BASE COAT ON THE RECESS AND ALSO IS A FANTASTIC APPLICATION WHERE THERE IS NO CEILING CAVITY.

#### **APPLICATION NO.2**

THE P.B.J.C. CAN ALSO BE USED AS A CEILING PROP. TURNED UPSIDE DOWN FURING CHANNELS CAN BE SCREWED TO THE APEX. NOTE THIS APPLICATION DOES NOT DAMAGE THE FACE OF THE PLASTER SHEETS.

#### **APPLICATION NO.3**

CUTTING OFF ONE WING OF THE P.B.J.C. ENABLES USE FOR CORNER SITUATIONS OF APPLICATION NO.2

### **TECHNICAL PROBLEMS**

CUTS OUT HANDLING & PREPARATION TIME.

### **PREPARATION FINISH**

TIGHT & FLAT LESS SKILL REQUIRED TO FINISH OFF. TIME TO COMPLETE 15 SEC.

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2004906298 18 May 2004

## **QUANTITIES**

THERE WERE 148732 RESIDENTIAL APPROVALS FOR THE YEAR 2001.  
SOURCE: H.I.A. MEDIA RELEASE.

THE NUMBER OF P.B.J.C.'S REQUIRED ON AVERAGE WOULD 5

TOTAL NUMBER REQUIRED WOULD BE 743660 THIS COULD BE DOUBLED WITH  
ADDITION OF COMMERCIAL PROPERTIES. TOTAL NUMBER THEREFORE WOULD BE.

**1487320** WITHOUT PLUSES FROM OTHER OUTLETS.

## **MAINTENANCE**

THE P.B.J.C. WILL PROVIDE A CONTROLLED RECESSED EVEN FILL BUTT JOINT AND  
THEREFORE ELIMINATE SAGGING AND FUTURE MAINTENANCE A MAJOR PROBLEM  
WITH CEILINGS.

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25 WIDE TYPICAL - RIB

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20mm-WIDE - BATTENS - 5mm - LIP & SIDES

USE MARKS

DEPTH GAUGE MARKS

Hand-drawn side elevation of a roof structure. The drawing shows a gabled roof with a central ridge. Dimensions are given in feet and inches. The total width is 360 inches. The roof slope is 15/12. The ridge is labeled "U-SHAPED-RIDGE" and "5mm x 10mm - H". The roof is labeled "5mm - LIP BOTH ENDS". The roof is labeled "EXPOSED TO SKIN ABOVE WHILE BACK BLOCKING". The roof is labeled "75 (TYP)".

# PLAN

U-SHAPED - RIDGE  
5mm-V-10mm-H

20mm WIDE - BATTENS - WITH 5mm LIP @ SIDES

# SECTION THRU RIDGE

PLASTERBOARD BUTT  
JOINT CONNECTOR

SPECIFICATION :-

OUT OF - RECYCLED PLASTIC

THICKNESS TO BE - 5 mm

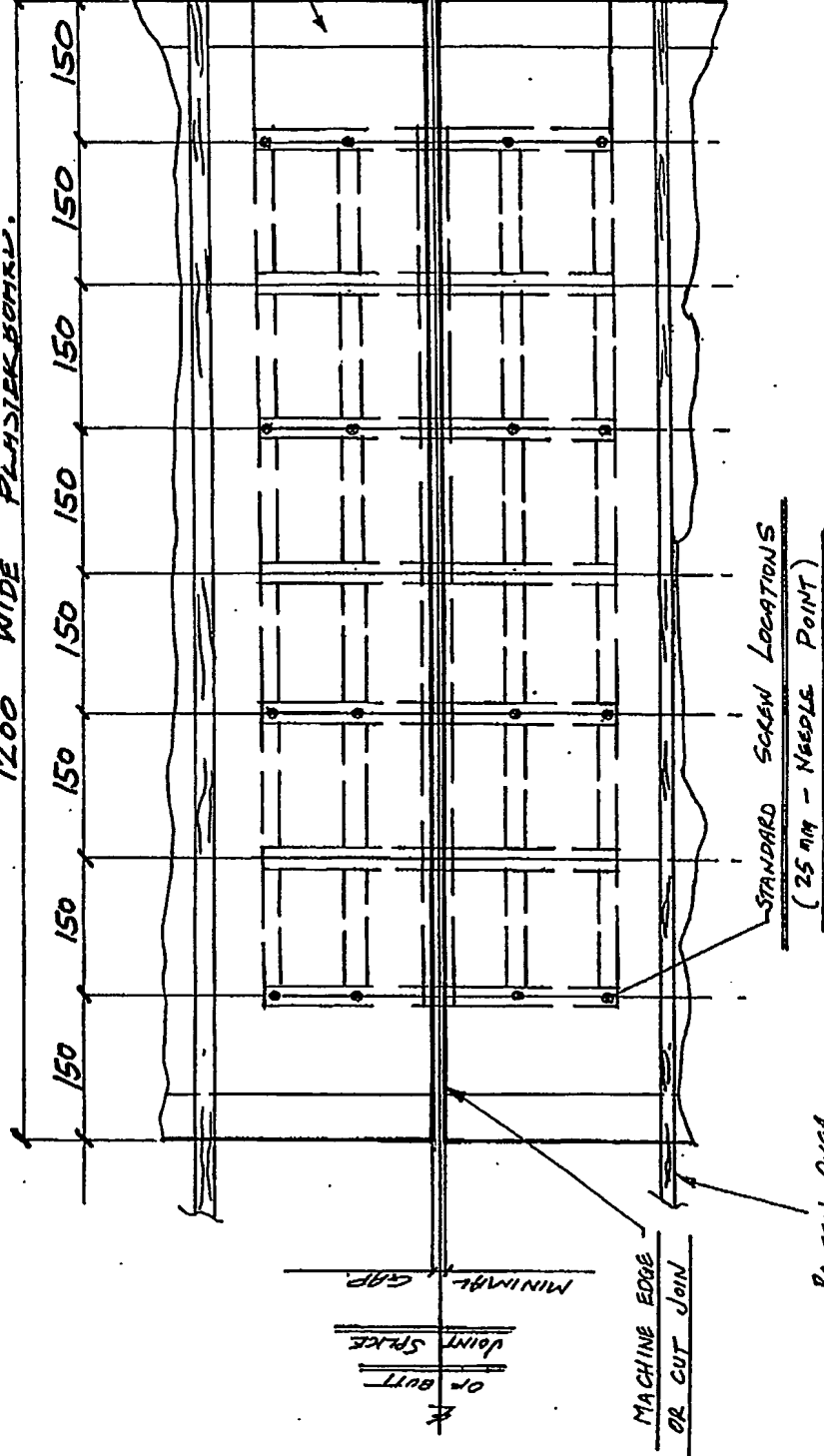
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**NOBLE STEEL DRAFT**  
Structural Steel & Piping  
Phone & Facsimile (03)

**NOBLE STEEL DRAFT**  
Structural Steel & Plate  
Phone & Facsimile (03)

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OUT

NOBLE STEEL DRAPER  
Structural Steel Erection  
Phone & Fabricator

SHAYNE TURNER

MASTER BOARD

# Document made available under the Patent Cooperation Treaty (PCT)

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